

Title (en)  
NON-AQUEOUS ELECTROLYTE SECONDARY BATTERY, AND METHOD FOR MANUFACTURING POSITIVE ELECTRODE PLATE USED THEREIN

Title (de)  
SEKUNDÄRBATTERIE MIT WASSERFREIEM ELEKTROLYT UND VERFAHREN ZUR HERSTELLUNG EINER DARIN VERWENDETEN POSITIVEN ELEKTRODENPLATTE

Title (fr)  
BATTERIE SECONDAIRE À ÉLECTROLYTE NON AQUEUX ET PROCÉDÉ DE FABRICATION DE PLAQUE D'ÉLECTRODE POSITIVE L'UTILISANT

Publication  
**EP 3930038 A4 20220427 (EN)**

Application  
**EP 19916472 A 20191129**

Priority  
• JP 2019027821 A 20190219  
• JP 2019046731 W 20191129

Abstract (en)  
[origin: EP3930038A1] Disclosed is a method for manufacturing a positive electrode plate, wherein even when a positive electrode mix layer is densely compressed, the positive electrode plate is prevented from being so greatly bent that wrinkles created in non-coated regions during transport, winding, or lamination develop into deep wrinkles or cracks, thus avoiding the inability to transport or wind the positive electrode plate. This manufacturing method can provide a positive electrode plate having a positive electrode mix layer formed on the surface thereof, wherein the filling density of the positive electrode mix layer is at least  $3.4 \text{ g/cm}^3$ , and the warpage amount  $h$  of the positive electrode plate in the width direction perpendicular to the longitudinal direction satisfies  $0.0 \leq h \leq 3.0 \text{ mm}$  per 1 m in the longitudinal direction.

IPC 8 full level  
**H01M 4/13** (2010.01); **H01M 4/04** (2006.01); **H01M 4/131** (2010.01); **H01M 4/139** (2010.01); **H01M 4/1391** (2010.01); **H01M 4/525** (2010.01); **H01M 4/02** (2006.01)

CPC (source: EP US)  
**H01M 4/0404** (2013.01 - EP); **H01M 4/0435** (2013.01 - EP US); **H01M 4/131** (2013.01 - US); **H01M 4/1391** (2013.01 - EP US); **H01M 4/525** (2013.01 - EP US); **H01M 2004/021** (2013.01 - EP US); **H01M 2004/028** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP)

Citation (search report)  
• [X1] US 2010119932 A1 20100513 - NAKURA KENSUKE [JP], et al  
• [X1] JP 2006278265 A 20061012 - SANYO ELECTRIC CO  
• [X1] US 2016308193 A1 20161020 - MIYAZAKI SHINYA [JP], et al  
• See references of WO 2020170543A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3930038 A1 20211229**; **EP 3930038 A4 20220427**; CN 113439352 A 20210924; JP WO2020170543 A1 20211216; US 2022140308 A1 20220505; WO 2020170543 A1 20200827

DOCDB simple family (application)  
**EP 19916472 A 20191129**; CN 201980092073 A 20191129; JP 2019046731 W 20191129; JP 2021501583 A 20191129; US 201917428391 A 20191129